

ABSTRACT

Title: The effect of manual lymphatic drainage on the musculus soleus muscle tension in patients with chronic venous insufficiency.

Aims: The aim of this thesis is to summarize theoretical knowledge about chronic venous insufficiency, muscle tension and manual lymphatic drainage and then to perform a pilot study to determine whether people suffering from chronic venous insufficiency have changed muscle tone of musculus soleus and to verify whether the implementation of a single manual lymphatic drainage of the lower limbs results in a change of muscle tension of musculus soleus.

Methods: There were three patients who participated in the experiment. Anthropometric examinations of circuits of both lower limbs on all patients was carried out, using measuring tape and then a muscle tone of musculus soleus was measured using a device called myotonometer. After that the single manual lymphatic drainage of one lower limb (more affected lower extremity) was performed. The second, untreated leg was considered to be the control limb. There was also performed basal treatment of the neck, before every manual lymphatic drainage of lower limb. Circumferential dimensions of both lower limbs were measured immediately after manual lymphatic drainage and then 15 minutes later again. After that the muscle tone of musculus soleus was measured also on both legs. The data obtained from the measurements using myotonometer were processed using computer technology.

Results: Hypotheses were not confirmed. However, the experiment demonstrated the effectiveness of manual lymphatic drainage on the influence of the lower limb edema associated with chronic venous insufficiency by reduced circumferential dimensions, more on the treated leg. Furthermore, a single manual lymphatic drainage demonstrated a tendency to change the musculus soleus muscle tension, towards normal tension. At the same time, this therapeutic method positively affects the elasticity of the muscle mentioned above.

Key words: chronic venous insufficiency, muscle tension, lymphatic system, manual lymphatic drainage